

PATENT**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: Mostafazadeh et al.

Attorney Docket No.:

NSC1P225R/P03405D1-R1

Application No.: 10/044,162

Examiner: Pham, T.

Filed: January 11, 2002

Group: 2823

Title: PLASTIC PACKAGE WITH EXPOSED
DIE AND METHOD OF MAKING SAME

Confirmation No.: 3102

DECLARATION OF PRIOR INVENTORSHIP UNDER 37 CFR § 1.131Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Shahram Mostafazadeh, declare as follows:

1. I am one of the co-inventor of U.S. Patent No. 6,117,710 (hereinafter the '710 patent) and the above referenced reissue patent application, which is a reissue of the '710 patent.

2. Attached is a copy of a page from my engineering notebook that documents the conception of the concept that is described in the '710 patent (as well as the above referenced reissue patent application).

3. The date that this entry was made in my engineering notebook has been whited out from the copy provided. However, the entry was made in my engineering notebook prior to March 26, 1996.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true. I further declare that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine, or imprisonment, or both (under Section 1001 of Title 18 of the United States Code), and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.


Shahram Mostafazadeh11/29/04
Date

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One sided molded package without die attach pad.

Concept 3

Present invention is method to assemble integrated circuit using this method a one sided sticky tape such as the tape that is used for water seal but with different properties is attached to one side of the leadframe. This lead frame does not have solder attach pad. The die is then placed on the tape and wire bonded. So tape provides a support for die. After wire bond unit is molded on the top side. After molding the tape is removed from the bottom of the lead frame this leaves the bottom of the die and bottom of the lead frame exposed. There are many advantages associated with this method.

- 1) The back of the die is exposed so if die pass through specification at assembly site can be added to the site for thermal inspection.
- 2) The package will be thinner.
- 3) There is no need for epoxy with die attach. Die can be just placed on the tape.
- 4) There is no die attach pad limitations and several benefits.
- 5) Two interfaces, one between die attach pad and die and one between die attach pad and plastic is eliminated.



Statement of Operation

Witnessed operation (obtain two signatures)

Signature

Date

Witnessed

Date

Signature

Read and Understood (obtain two signatures)

Signature

Date

Witnessed

Date

Best Available Copy